

Title (en)

GUIDING AN INTERVENTIONAL IMAGING DEVICE

Title (de)

FÜHRUNG EINER INTERVENTIONELLEN BILDGEBUNGSVORRICHTUNG

Title (fr)

GUIDAGE D'UN DISPOSITIF D'IMAGERIE INTERVENTIONNELLE

Publication

EP 4285832 A1 20231206 (EN)

Application

EP 22197376 A 20220923

Priority

US 202263347692 P 20220601

Abstract (en)

The present invention relates to a device for guiding an interventional imaging device. In order to minimize the use of modalities like X-ray or CT, a device (10) for guiding an interventional imaging device is provided. The device comprises a data input (12), a data processor (14) and an output interface (16). The data input is configured to provide first image data as first data from a first imaging device. The first image data comprises a representation of the interventional imaging device inserted within a vessel structure of a subject. The first image data comprises image data relating to a first point in time. The data input is also configured to provide second data relating to a movement of the interventional imaging device. The second data relates to the first point in time and to at least a second point in time. The data processor is configured to estimate a pose of the interventional imaging device in the first image data. The data processor is also configured to track a relative motion of the interventional imaging device based on the second data. The data processor is further configured to compute an updated pose estimate of the interventional imaging device based on the estimated pose and the tracked relative motion. The data processor is furthermore configured to generate an updated indicator of the interventional imaging device based on the computed updated pose estimate. The data processor is also configured to augment the first image data with the updated indicator. The output interface is configured to provide the augmented first image data. In an example, the first imaging device is an X-ray imaging device and the second imaging device is a bronchoscopy imaging device.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] WO 2020182997 A1 20200917 - KONINKLIJKE PHILIPS NV [NL]
- [A] WO 2021122344 A1 20210624 - KONINKLIJKE PHILIPS NV [NL]
- [A] WO 2020083798 A1 20200430 - KONINKLIJKE PHILIPS NV [NL]

Designated contracting state (EPC)

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